| Work Ordei March-12-13 1:5 | | | | * <u>Q</u> | 8419 |) * | | | | | | Page 1 | |
|---|-------------------------------------|--|--|-------------------|---------------------------|--------------------------|------------|--------------|---------------|-----------------|------------------|--------------------|--------------|
| Revision ID: | O2013-2 Mirror Bracket RH, 205 | | | Accept | * | น คกก | <u>040</u> | 100 |)* s | etup Star | 1 70 - | S1* S2* | |
| Start Date: 3 Required Date: 3 Reference: | S/11/13 Start Qu S/15/13 Req'd Q | - | *1* *1* | | | Cust Item I Customer: | ID: | | | | | | |
| | Process Plan:QC: | - : | Date: /3-03-/ | |); | | ate: | <u> </u> | R | tun Stai Sto | " \[\] | R1* R2* | |
| Sequence ID/ Work Center ID | Operatio Descript | ion | | Set Up/ Run Ho | | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | | , |
| Draw Nbr | Revision Nbr | · | | | | i | | | | | | - 33 _{1.} | 3/05/04 |
| D2013 100 *100* Brake NC Brake NC | Rev C NC BRAK | Memo 1-Punch as po 2-Flatten end | or template D2013-Tłano s of D2013-2 tube as per be as per Dwg D2013 us equired | Dwg D2013 usin | | -2. | | | {_/ | · | | F | - 3-08-24 |
| *110 *110* QC Quality Control | QC5- Insp | ect part comple - - Memo | teness to step on W/O | 0.00 0.00 | DAS 27 9-89 13,8 | | | | • | ノ | | | |
| *115 *115* Packaging | Identify as | per dwg & Sto | ck Location: WAG | 0.00 | | | | | | _ E | 13- | 8-21 | |

| | | | | | | | | | | | DQA: | D | ate: | |
|---------------|-------|-----------|----------|-------------|-----|----------------------------|----------|-------------|-------------------------|----------|--------------|--------------|----------|--------------------|
| NCR: | Yes | / No | | | | WORK ORDER NON- | COI | NFORM | MANCE / UPDATE | | | | _ | |
| | | | | | | | | | | | QA Closed: | D | ate: | |
| Work Order: | | | | DISPOSITION | | AGAINST DEPARTMENT/PROCESS | | | | | | | | |
| WOIR OIG | C1. | | | | | Rework | ٦ : | | Skid-tube Crosstu | he | 1 | Water Je | t∏ | Engineering |
| Part I | No. | | | | | Scrap | ╣ ' | | Machining Small F | — | Pro | d. Eng. Coor | \vdash | Quality |
| | • | | | | | Use-as-is | 1 | | noforming Finishi | ing | 4 | re/Packaginį | - | Other |
| NCR I | No. | | | | | Work Order Update |] | | Large Fab Compos | ite |] | Supplie | ıΠ | |
| <u> </u> | - | | , | | 1 | <u> </u> | | <u> </u> | | | | | | |
| Root | - 1 | | | | | ption of work order update | l l | Initial | Action | | Sign & | | İ | |
| Cause | | Date | Step | Qty | | or Non-conformance | Ch | nief Eng | Description | | Date | Verification | on_ | QC Inspector |
| Doc/Data | | | | | | | | | | | | | ļ | |
| Equip/Tooling | | | | | | | 1 | | | | | | | |
| Operator | Ш | | | | | | j | | | | | | - 1 | |
| Material | | | 1 | | | | 1 | | | | | | ł | |
| Setup | | | <u> </u> | | | | | | | | | | ŀ | |
| Other | | | İ | | Ì | | 1 | | | | | | 1 | |
| Process | | | | | | | | | | | | | | |
| Supplier | | | ĺ | | | | | | | | | | | |
| Training | | | 1 | | | | ļ | | | | | | | |
| Unapproved | | | <u> </u> | | | | <u> </u> | | | | | | j | |
| | | | | | | F | AUI | T CATE | GORY | | | <u> </u> | | |
| Landi | ng (| Gear | | | _ | General | | | | | = | | | |
| | | Bending | | | | Bend | | Grain | | | Ovalized | | \sqcup | Pressure/Forced |
| | | Centre No | ot Conce | ntric to | o/s | BOM/Route | | Hardwa | re | | Over/Under | tolerance | | Temperature/Cure |
| | | Cracks | | | | Broken/Damaged \ | | Inspecti | on Incomplete | | Part Incorre | rt . | | Weld |
| | | Crushed/ | Crimped | | | Burrs | | Instruct | ions Incomplete/Unclear | | Part Lost/Mi | ssing | | Wrong Stock Pulled |
| i | Cuffs | | | | | Contamination | | Maintenance | | | Part Moved | | | |

Mislabeled

Out of Calibration

Out of Sequence

Outside Dimensions

Misread

Offset

Positioned Wrong

Power Loss/Surge

Other

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Heat Treat

Inspection Strip in Tube

Torque Waves in Extrusion

Countersink

Cut Too Short

Drill Holes

Drawing

Finish

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Work Order ID 98419 Page 2 March-12-13 1:54:47 PM Accept Item ID: D2013-2 Setup Start **Revision 1D:** Stop Mirror Bracket RH, 205 Item Name: Start Qty: 1.00 3/11/13 Start Date: Cust Item ID: Req'd Qty: 1.00 Required Date: 3/15/13 Customer: Reference: Start Run Date: _______ Tooling: Approvals: Process Plan: Stop SPC (Y/N): Date: Sequence ID/ Tool ID Tool # Plan Reject Reject Set Up/ Accept Insp. Operation Code Qty Number Stamp Qty Work Center ID Description Run Hours 0.00 QC21- Final Inspection - Work Order Release 120 MLJ 13-08-21 MLJ 13-08-21 *120* 0.00 QC Memo

Quality Control

| | | | | | | | | | | | | DQA: | Da | te: | |
|---------------|-------------------|--------------------------|----------|----------|-------------|----------------------------|----------|---------|---------------------|-----------|----------|---------------|---------------|----------|--------------------|
| NCR: | Yes | / No | | | | WORK ORDER NON-C | O | VFORM | MANCE / UPI | DATE | | · | · | | |
| | | | | | | | | | ·- | | _ | QA Closed: | Da | te: | |
| Mark Ord | had a un | | | | | DISPOSITION | | | | | | | | | |
| Work Ord | ет. | | | | | Rework | | | Skid-tube Crosstube | | | Water Jet | | | Engineering |
| Part I | ۷n | | | | | Scrap | 1 | | Machining | Small Fab | 1 | Pro | i. Eng. Coor. | | Quality |
| ' | 10. | <u> </u> | | | | Use-as-is | 1 1 | | noforming | Finishing | ٦ | | e/Packaging | F | Other |
| NCR I | No. | | | | | Work Order Update | 1 | | Large Fab | Composite | ٦ | • | Supplier | _ | |
| | | | | _, | | <u> </u> | • | | | | _ | | - | | |
| Root | | | | | 1 | ption of work order update | 1 | Initial | Act | | 1 | Sign & | | i | · |
| Cause_ | | Date | Step | Qty | | or Non-conformance | Ch | ief Eng | Descr | iption | 4 | Date | Verificatio | n | QC Inspector |
| Doc/Data | L | | | | | | | | | | ı | | | | Ì |
| Equip/Tooling | | | | ļ i | | | İ | | | | ŀ | | | | |
| Operator | L_ | | | | | | | | | | ١ | | | | |
| Material | | | | | | | | : | 1 | | ١ | : | | |] |
| Setup | | | | | | | ŀ | | | | | | | | |
| Other | 匚 | | <u> </u> | | | | 1 | | | | ١ | | | | |
| Process | <u> </u> | ļ | | [| | | | | | | 1 | · | | | |
| Supplier | <u> </u> | ļ | | | Ì | | | | | | ı | | | | |
| Training | <u> </u> | | 1 | | | | | : | | | ı | | | | } |
| Unapproved | | | | | <u> </u> | | L | | | <u> </u> | ╛ | | | | <u> </u> |
| | | | | | | | AUL | T CATE | GORY | _ | _ | | <u> </u> | | |
| Landi | ng (| 1 | | | _ | General | | 7 | | _ | _ | 1 | | | ī |
| | ┕ | Bending | | | <u> </u> | Bend | | Grain | | <u> </u> | - | Ovalized | | _ | Pressure/Forced |
| | 匚 | Centre No | ot Conce | ntric to | o/s | BOM/Route | <u> </u> | Hardwa | | <u> </u> | — | Over/Under | | <u> </u> | Temperature/Cure |
| | L | Cracks | | | | Broken/Damaged | <u> </u> | 4 | on Incomplete | _ | - | Part Incorrec | | igspace | Weld |
| | $ldsymbol{f eta}$ | Crushed/ | Crimped | | <u> </u> | Burrs | <u>_</u> | ┪ | ions Incomplete/U | Jnclear | \dashv | Part Lost/Mi | ssing | _ | Wrong Stock Pulled |
| | _ | Cuffs | | | | Contamination | _ | Mainte | | <u> </u> | | Part Moved | | | |
| ļ | <u></u> | Heat Trea | | | | Countersink | | Mislabe | | <u> </u> | —1 | Positioned V | - | _ | 1 |
| | | Inspection Strip in Tube | | | | Cut Too Short | 1 | Misread | | | | Power Loss/S | Surge | | Other |

Offset

Out of Calibration
Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Torque Waves in Extrusion

Drill Holes

Drawing

Finish Folio Work Order ID:

Parent Item:

98419 D2013-2

Parent Item Name:

Mirror Bracket RH, 205

Comments:

IPP Rev:A

New Issue 05-11-01 JLM

Start Date: 3/11/13

Required Date: 3/15/13

Start Qty: 1.00

Required Qty: 1.00

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|--|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|----------|
| M304TR0.750W.049 304 RD Tube .750 x .049\ | w | Purchased | No | | | 100 | f - | 398.1754 | 1.9473 | 2.049789 | 5 | SI_ | 13/05/06 |

Page 1

| | | | | | | | | | | DQA: | Date | | | |
|---------------|------------|-----------|----------|---|----------------------------|----------|----------------------------|-------------------------|----------|-----------------------|---------------|--------------------|--|--|
| NCR: Y | es / No | | | | WORK ORDER NON-C | ON | QA Closed: | Date: | | | | | | |
| Mark Onda | | | | | DISPOSITION | 1 | AGAINST DEPARTMENT/PROCESS | | | | | | | |
| Work Orde | er: | | | | Rework | ıl | | Skid-tube Crosstube | 1 | Water Jet Engineering | | | | |
| Part No. | | | | | Scrap | | r | Machining Small Fab | | | d. Eng. Coor. | Quality | | |
| NCR No. | | | | Use-as-is Thermoforming Finishing Work Order Update Large Fab Composite | | | ⊢ | Rec/Stor | Other | | | | | |
| Root | | | | Descri | ption of work order update | Ini | tial | Action | | Sign & | | | | |
| Cause | Date | Step | Qty | , | or Non-conformance | Chie | f Eng | Description | | Date 1 | Verification | QC Inspector | | |
| Doc/Data | | | | | | | | | | | • | | | |
| Equip/Tooling | | | İ | | : | | | | | | · · | | | |
| Operator | | 1 | Ì | ļ | | ŀ | | | | | 1 | | | |
| Material [| | | | ! | | | | | | Ì | · . | | | |
| Setup | | į | - | | | | ļ | | | | | | | |
| Other | _ | 1 | <u> </u> | | | 1 | | | | | | | | |
| Process | | | | | | • | | | | | • | | | |
| Supplier | | | | | | 1 | | | | | | | | |
| Training | | | | | | | | | | | . * | | | |
| Unapproved | | ļ | <u> </u> | <u></u> | | <u> </u> | | | | | | | | |
| | | | | | | AULT | CATE | GORY | | | | | | |
| Landir F | ng Gear | | | <u></u> | General | | | | _ | 1 | | 7 | | |
| | Bending | | | | Bend | \vdash | irain | | ⊢ | Ovalized | | Pressure/Forced | | |
| ļ | Centre No | ot Concei | ntric to | o/s | BOM/Route | \vdash | ardwa | | L | Over/Under | | Temperature/Cure | | |
| | Cracks | | | <u> </u> | Broken/Damaged | _ | • | on Incomplete | \vdash | Part Incorred | | Weld | | |
| | Crushed/ | Crimped | | \vdash | Burrs | \vdash | | ions Incomplete/Unclear | _ | Part Lost/Mi | ssing | Wrong Stock Pulled | | |
| | Cuffs | | | <u> </u> | Contamination | ⊢ | | nance | <u> </u> | Part Moved | | | | |
| | Heat Treat | | | | Countersink Mislabeled | | | | | Positioned V | Vrong | | | |

Misread

Offset

Out of Calibration

Out of Sequence

Outside Dimensions

Power Loss/Surge

Other

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Inspection Strip in Tube

Torque Waves in Extrusion

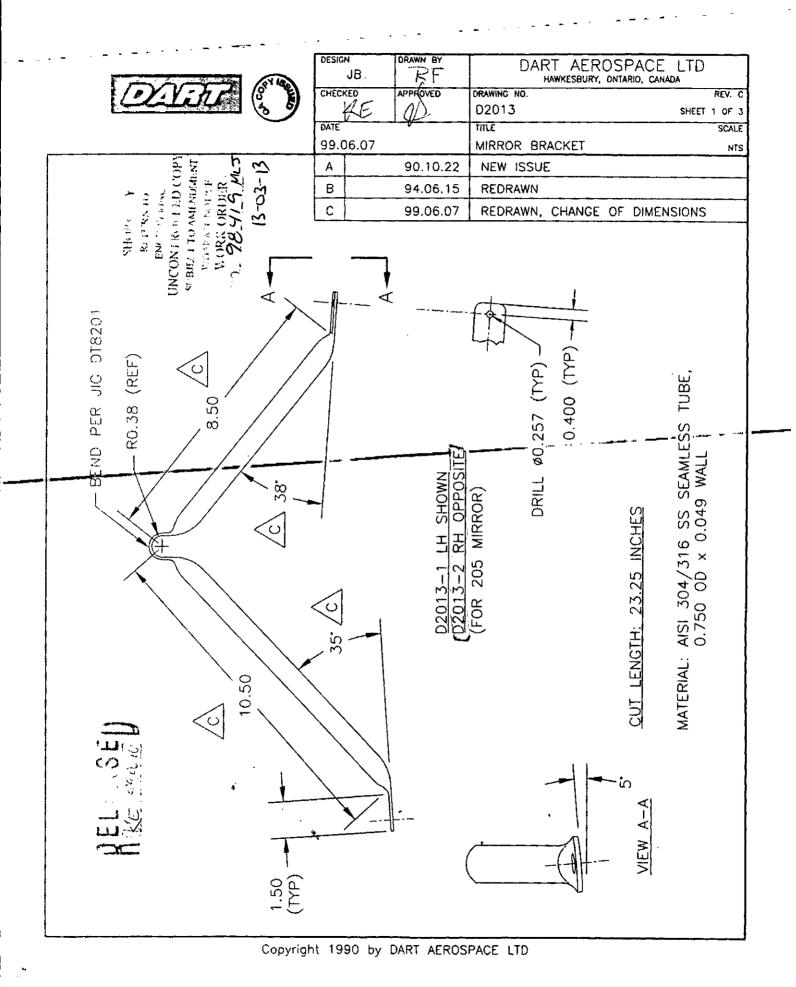
Cut Too Short

Drill Holes

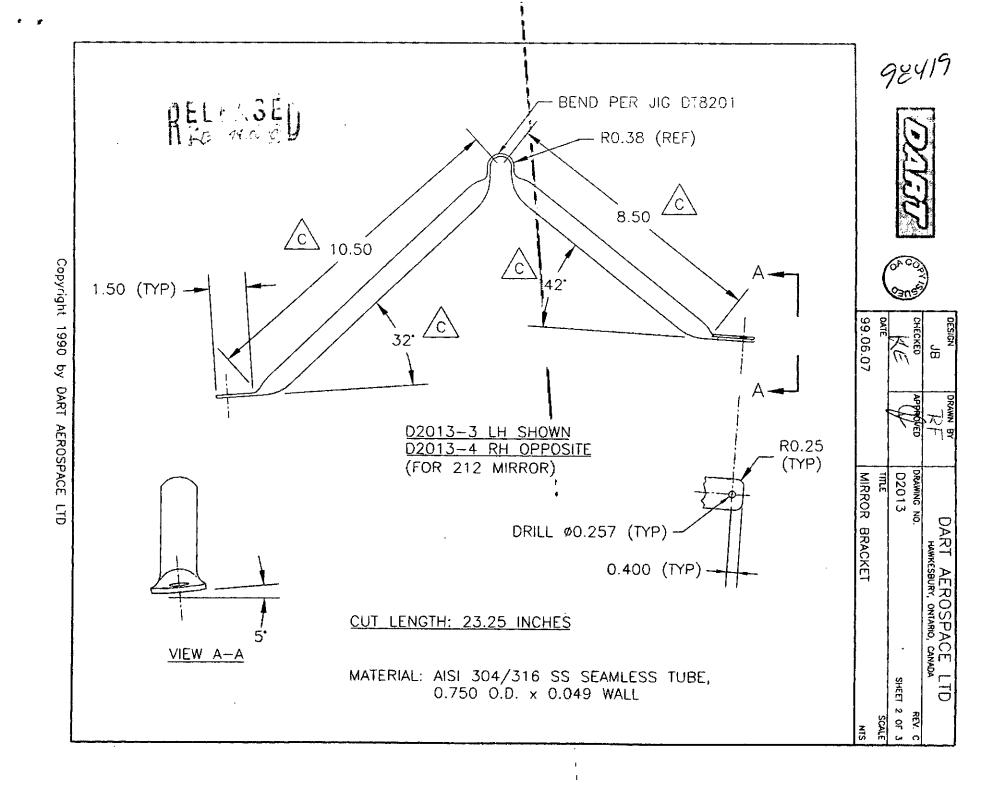
Drawing

Finish Folio

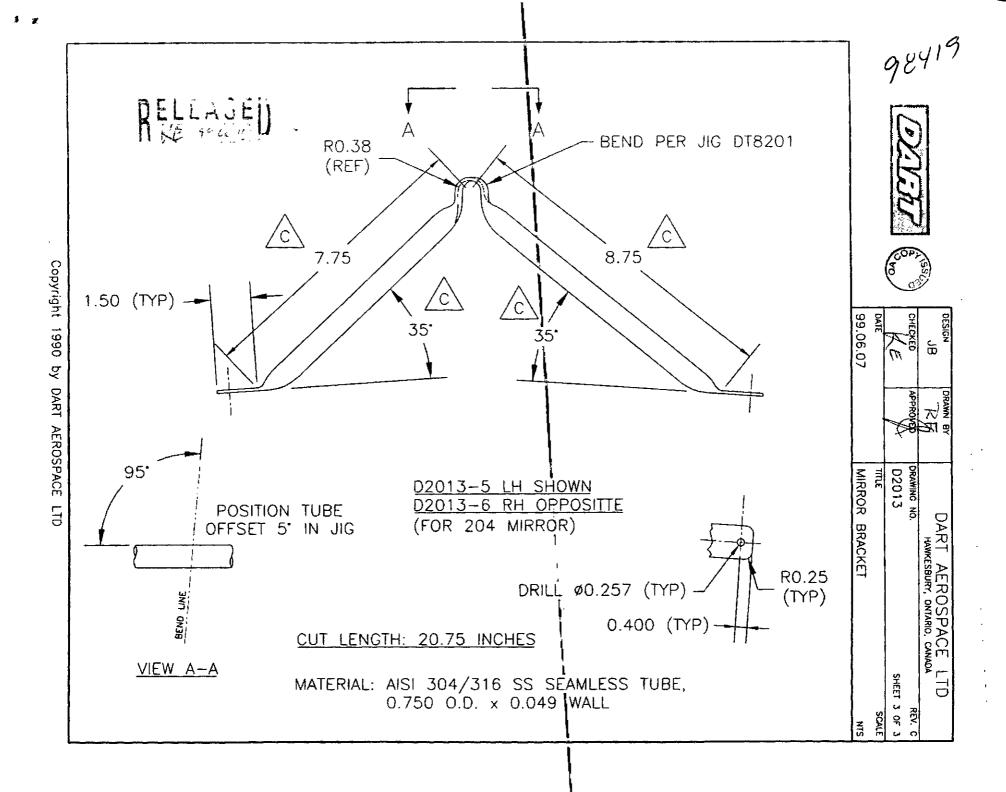
H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G



| | | | - |
|-------|----------|--|--------------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| i | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | , | | |
| | • | | |
| | | | |
| | | | |
| | • | | |
| | • | | |
| | | | |
| | | | |
| | | | |
| | | | |
| C + 1 | | | |
| | • | | • |
| | <u> </u> | | |



| | | · | | |
|---|---|---|--|--|
| | | | | |
| | | | | |
| , | | | | |
| | * | | | |
| | | | | |
| | | | | |
| | | | | |



•

•